Hospitals and Health Services Enterprises as Social Systems

In this issue, the paper deemed "classic" by the *Bulletin's* editor focuses on the hospital as a social system. Formerly, hospitals were regarded as charitable institutions, for whose services their patients were expected to express gratitude. Today, hospitals and related health-care systems such as HMOs are emerging as profit-oriented enterprises concerned with market share, customers, and the like. Under whatever auspices they are owned and operated, however, hospitals, like most service enterprises, are labor-intensive. Above all, health-services entities are "caring" systems.[1] They are staffed and managed by individuals; the genesis of whose attitudes, responses to incentives, and behavior requires critical understanding.

During the past four decades the central importance of the Placebo Effect has been well documented. At the level of individual interactions of patients with physicians and their ministrations, Beecher concluded from a review of 15 studies that the Placebo Effect provided, on average, about 35% of the outcome benefits from most clinical interventions.[2] Much less well-known by managers and Boards of Directors of hospitals and health-care systems is the equally vital role of the Hawthorne Effect in the optimal functioning of almost all human enterprises.

For those not familiar with the Hawthorne experiments conducted in the 1930s by Harvard investigators at AT&T's Western Electric plant of the same name, let me briefly describe them. Essentially these classic studies showed that when employees perceived that the company "cared," no matter how the investigators altered the workplace environment, productivity always improved. The increased output of telephone relay assembly operators studied in two series ranged from 8.9% to 17.5% and 5.9%

to 24.1%. Fifteen percent, therefore, might be a fair estimate of the Hawthorne Effect's beneficial potential.[3]

In 1936 Spiro not only confirmed Beecher's original estimate of 35% benefit in outcomes associated with the Placebo Effect but reported that the "healing rate" for duodenal ulcer craters in controlled clinical trials runs from 20% in London to 70% in Switzerland. In the United States it runs from 50% to 60%.[4] Spiro then went on to describe two clinical trials, using identical protocols, in London and Dundee with quite different Placebo ulcer healing rates: 73% in Dundee and 44% in London.[4] Both the Hawthorne Effect and the Placebo Effect appear to be at work in such diverse environments. How else can such large differences be explained?

Starting in the late 1950s the Nuffield Provincial Hospitals Trust of London sponsored a wide range of studies concerned with improving the efficiency and effectiveness of hospitals and health services generally. Among them was a series conducted by the late Reginald Revans, Professor of Operations Research, at the University of Manchester.[5] Recognizing the importance of the Hawthorne Effect, he showed in numerous studies in British hospitals, after controlling for other variables, that the attitudes of management and supervisory personnel had a direct influence on the turnover of nurses and other staff and, perhaps of greater importance, on patients' length of hospital say for six common medical and six common surgical illnesses. The more authoritarian, hierarchical, and controlling the management, the greater the staff turnover, especially for nurses, and the longer the patients' average length of stay. Conversely, the more supportive, trusting, and constructive the management, the lower the staff turnover and the shorter the average length of stay.[6] The impact of managerial attitudes and behavior on the quality of care, patient satisfaction, and costs is readily apparent.

Since the 1930s the Hawthorne findings have been implemented throughout the industrial world by most progressive organizations. Unfortunately, for the most part, the latter have not included hospitals and health-services organizations. There can be

little doubt, however, that the Hawthorne Effect as well as the Placebo Effect are relevant to all service and "caring" enterprises. Together these two ubiquitous phenomena seem to account, on average, for up to about one-half of the outcome benefits from all health-care interventions.[7] These are truly substantial contributions and their importance cannot be over-emphasized. People "feel better" after deciding to put themselves, for example, in the hands of a physician, nurse, or hospital. "Caring is Part of the Cure" read the buttons worn by everyone in a campaign at the Johns Hopkins Hospital 25 years ago.

This is serious business not only for doctors, nurses, and other health-care personnel, but also for politicians, trustees, boards of directors, and managers at all levels concerned with the provision of health services. In contemporary campaigns to control costs, much greater attention needs to be paid to the entire culture of health-care systems, hospitals, and related institutions. Caring managers throughout an organization can have direct impacts of the attitudes and behavior of other "caring" personnel. In the final analysis, management's primary objective for any health-care system and its institutions, as labor-intensive social enterprises, should be measurable improvement in patient outcomes for the money spent, not just reduction in that amount.

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